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EXAMINER	
LEE, BENJAMIN WILLIAM	

ART UNIT	PAPER NUMBER
3714	

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

## Office Action Summary

Application No.

10/772,430

Applicant(s)

MAKUTA ET AL.

Examiner

Benjamin W. Lee

Art Unit

3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. The amendment to the claims, specification, and drawings filed on 09/25/2007 has been entered. Claims 1-19 are pending in this application. Claims 1, 4-7, and 11-13 have been amended. Claims 15-19 are new.

#### *Claim Objections*

2. Claims 1, 15, and 18 are objected to because of the following informalities:
- “contractable” in claim 1, line 9 and claim 18, line 5 should be changed to --contractible--.
  - “brackets at mated” in claim 15, line 11 should be changed to --brackets are mated--.

Appropriate correction is required.

#### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDowell (US 6,083,106) in view of Yamasaki et al. (US 5,547,382, hereinafter Yamasaki).

Re claim 1: McDowell discloses a riding simulation system for providing an operator with a pseudo-experience of running conditions of a car by displaying scenery seen to the driver as a video image on a display based on the operating condition of operation by the operator (see abstract), the riding simulation system comprising:

a steering handle mechanism/steering wheel input device 28 gripped and operated by the operator (see Fig. 1; col. 5, lines 50-67);

a step mechanism comprising two pedals, which are operated by the feet of the operator, (see Figs. 1 and 2; col. 6, lines 28-39);

a connection shaft/upper telescopic portion 25 and lower telescopic portion 26 for connecting the steering handle mechanism and the step mechanism to each other, the connection shaft provided to be extendable and contractible (i.e. telescopic) along the axial direction thereof (see col. 6, lines 7-22);

a frame body having at least two main frames (i.e. a left and a right side frame, see Fig. 2),

wherein the steering handle mechanism is mounted at the upper portions of the at least two main frames (see Fig. 1) and the connection shaft is mounted to lower portions of the at least two main frames (steering wheel base portion 29, see Fig. 1; col. 5, lines 50-67).

However, McDowell fails to explicitly disclose that the riding simulation system is used to simulate motorcycles and that the pedals are used as a brake pedal and a gear change pedal.

Yamasaki discloses a riding simulation system for motorcycles featuring two pedals used as a brake pedal and a gear change pedal similar to an actual motorcycle (see Fig. 33; col. 6, lines 14-29; col. 16, lines 45-61). Furthermore, the examiner notes that although the claim is directed toward simulating a motorcycle, the structures recited in McDowell anticipate the structures recited in the claim. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). See MPEP § 2114.

Therefore, in view of Yamasaki, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the pedals of McDowell as a brake and gear change pedal in order to simulate the operation of motorcycle.

Re claim 2: The teachings of McDowell as modified by Yamasaki as applied to claim 1 above have been discussed. McDowell further discloses the connection shaft is provided to be inclinable relative to the steering handle mechanism or the step mechanism. Support brace 32 is telescopically extendable (see Fig. 1; col. 6, lines 1-6).

Re claim 3: The teachings of McDowell as modified by Yamasaki as applied to claim 1 above have been discussed. Yamasaki further discloses a vibrator for a dummy engine vibration (see col. 17, lines 22-27). Therefore, in view of Yamasaki, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add the vibration motor to the system of McDowell in order to simulate engine vibration.

Re claim 4: The limitation "means for giving a reaction force in a direction opposite to a turning direction of said steering handle mechanism" in lines 2-3 invokes 35 U.S.C. 112, sixth paragraph.

The teachings of McDowell as modified by Yamasaki as applied to claim 1 above have been discussed. Yamasaki further discloses a handle moving motor 121a that provides a reaction force direction opposite turning in order to simulate the actual feel of steering (see Fig. 28; col. 14, lines 55-65). Therefore, in view of Yamasaki, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add the handle moving motor to the system of McDowell in order to simulate the feel of steering.

6. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamasaki in view of Lee et al. (US 6,522,037 B2, hereinafter Lee).

Re claim 5: Yamasaki discloses a riding simulation system for providing an operator with a pseudo-experience of a running condition of a motorcycle by generating a vibration based on

the operating condition by the operator, the riding system comprising a vibrator 175e for a dummy engine vibration in a steering handle mechanism (see Fig. 36; col. 17, lines 22-37).

However, Yamasaki fails to explicitly disclose a tapered bracket inserted into a taper surface portion in the steering handle pipe, wherein the bracket includes a pair of brackets and each of the brackets includes a recess on an inner surface thereof, and when the brackets are mated together, the recesses of the mating brackets form a space in which the vibrator is disposed.

Lee discloses bracket/case wherein the bracket includes a pair of brackets (upper case 23 and lower case 20, see Fig. 4) and each of the brackets includes a recess on an inner surface thereof (see Fig. 4), and when the brackets are mated together, the recesses of the mating brackets form a space in which the vibrator is disposed (see Fig. 4).

Therefore, in view of Lee, it would have been obvious to one of ordinary skill in the art at the time the invention was made to mount the vibrator in a pair of brackets forming an enclosure in order to hold the bracket and vibrator in place.

However, the system of Yamasaki as modified by Lee does not disclose a taper-shaped bracket. Applicant has not disclosed that placing the vibrator in a taper-shaped bracket fitting in a taper surface portion in the steering handle pipe solves any stated problem or is for any particular purpose. Moreover, it appears that the bracket of Lee performs equally well as the taper-shaped bracket of the applicant's invention.

Accordingly, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have modified the system of Yamasaki as modified by Lee to have a tapered bracket holding the vibrator in a taper surface portion in the steering handle pipe

because such a modification would have been considered a mere design consideration which fails to patentably distinguish over the system of Yamasaki as modified by Lee.

Re claim 6: Yamasaki discloses a riding simulation system comprising a vibrator for a dummy engine vibration in a steering handle mechanism and providing an operator with a pseudo-experience of a running condition of a motorcycle by generating a vibration based on the operating condition by the operator (see Fig. 36; col. 17, lines 22-37). The vibrator is engaged with an end portion of the steering handle pipe (see Fig. 36; col. 17, lines 22-37).

However, Yamasaki fails to explicitly disclose the vibrator is held in place in the steering handle pipe by a bracket and the bracket is screw engaged with an end portion of the steering handle pipe wherein the vibrator includes an eccentrically mounted weight extending from an outer end of the vibrator so as to be disposed in the enclosed hollow space.

Lee discloses a bracket/case for holding a vibrator wherein the vibrator includes an eccentrically mounted weight 30 (see Fig. 4) extending from an outer end (the weight extends from the outer ends of upper case 23 and lower case 20 towards the middle of the assembly, see Fig. 4) so as to be disposed in the enclosed hollow space (see Fig. 4).

Therefore, in view of Lee, it would have been obvious to one of ordinary skill in the art at the time the invention was made to mount the vibrator in an enclosed bracket in order to hold the vibrator in place and to prevent foreign objects from interfering with the motion of the eccentric weight.

However, the system of Yamasaki as modified by Lee does not disclose the bracket is held in place by a screw or screws.



Official Notice was taken in the previous Office Action dated 06/25/2007 that both the concept and advantages of mounting a bracket with a screw was well known and expected in the art at the time the invention was made. Since the applicant did not traverse the official noticed facts by specifically pointing out supposed errors, the official noticed facts taken in the rejection dated 09/22/2005 are now considered admitted prior art. See MPEP §2144.03.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to secure the vibrator bracket of the system of Yamasaki as modified by Lee with a screw or screws in order to secure the bracket and vibrator in place.

Re claim 7: Yamasaki discloses a riding simulation system comprising a vibrator 175e for dummy engine vibration in a steering handle mechanism and providing an operator with a pseudo-experience of a running condition of a motorcycle by generating a vibration based on the operating condition by the operator (see Fig. 36; col. 17, lines 22-37),

wherein the vibrator is inserted and held in an inside of one end portion of a steering handle pipe constituting the steering handle mechanism (see Fig. 36; col. 17, lines 22-37), and a predetermined gap is formed between an outer circumferential portion of the one end portion of the steering handle pipe and a steering handle grip attached to the outer circumferential portion (the gap is formed by the switch case 175l, see Fig. 36; col. 17, lines 35-37).

However, Yamasaki fails to disclose the vibrator is held in a bracket wherein the bracket includes a pair of brackets and each of the brackets includes a recess on an inner surface thereof, and when the brackets are mated together, the recesses of the mating brackets form a space in which the vibrator is disposed.

Lee discloses bracket/case wherein the bracket includes a pair of brackets (upper case 23 and lower case 20, see Fig. 4) and each of the brackets includes a recess on an inner surface thereof (see Fig. 4), and when the brackets are mated together, the recesses of the mating brackets form a space in which the vibrator is disposed (see Fig. 4).

Therefore, in view of Lee, it would have been obvious to one of ordinary skill in the art at the time the invention was made to mount the vibrator in a pair of brackets forming an enclosure in order to hold the bracket and vibrator in place.

Re claim 8: The teachings of Yamasaki and Lee as applied to claim 7 above have been discussed. Yamasaki further discloses the steering handle grip is a throttle grip 175m (see Fig. 36; col. 17, lines 35-37).

7. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamasaki in view of Duignan (US 7,264,099 B2).

Re claim 11: The limitation "click generating means for..." in lines 6-8 does not invoke 35 U.S.C. 112, sixth paragraph. The newly added limitation "wherein the click generating means comprises a ball member and triangular cover member provided with a hole portion in which the ball member is engaged when said gear change pedal is in a center position" modifies the "click generating means" with sufficient structure and material for achieving the specified function. See MPEP § 2181(I).

Yamasaki discloses a riding simulation system for providing an operator with a pseudo-experience of running conditions of a motorcycle by displaying scenery seen to the rider as a video image on a display based on an operating condition upon an operation by the operator (see Fig. 1; col. 6, lines 30-52) and detecting a gear change by a sensor provided at a gear change pedal (see Fig. 33; col. 16, lines 45-61). Yamasaki further discloses that the gear change feeling in an actual two-wheeled vehicle is simulated (see col. 16, lines 58-61).

However, Yamasaki fails to explicitly disclose a click generating means for generating a click feeling similar to a gear change in an actual motorcycle when a gear change is made by operating the gear change pedal, wherein the click generating means comprises a ball member and triangular cover member provided with a hole portion in which the ball member is engaged when said gear change pedal is in a center position.

Duignan discloses a motorcycle transmission shifting mechanism. The shift mechanism has spring-loaded ball members 72 and 74 (see Fig. 1; col. 5, lines 1-10) and a triangular cover member/cam plate 28 (see Fig. 1; col. 3, lines 55-63) provided with a hole portion 76 in which the ball member is engaged when the gear change pedal is in a center position (see Fig. 1; col. 5, lines 1-10). The examiner notes that although it appears the applicant's invention has the hole portion is located on the "triangular cover member," the claim has been broadly interpreted to mean that that the hole portion may be included anywhere since the "triangular cover member" is merely provided with hole portion and is silent with respect to the actual location of the hole portion.

Therefore, in view of Duignan, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add the click-generating means of the motorcycle

transmission shifting mechanism to the system of Yamasaki in order to more accurately simulate the feeling of a gear change by using actual transmission parts of a motorcycle.

Re claim 12: The teachings of Yamasaki and Duignan as applied to claim 11 above have been discussed. Duignan further discloses when a gear change is made by operating the gear change pedal, the ball member is released from the hole portion and thereafter engaged in the hole portion, whereby a click sound and vibration are generated (see col. 5, lines 1-10). The examiner notes that "hole portion" is broadly interpreted to mean the collective series of detents 76 since the limitation "hole portion" is not limited to single hole/detent. Any one of the balls 72 or 74 may be interpreted to the claimed "ball member."

8. Claims 13, 14, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDowell, Yamasaki, and Tosaki et al. (US 5,989,123, hereinafter Tosaki).

Re claim 13: Yamasaki discloses a riding simulation system for providing an operator with a pseudo-experience of running conditions of a motorcycle by displaying scenery seen to the rider as a video image on a display based on an operating condition of a dummy operating mechanism operated by the operator (see Fig. 1; col. 6, lines 30-52), the riding simulation system comprising a handle mechanism for operating a steering handle with a handle shaft portion as a turning fulcrum by the operator (see Fig. 36) and a frame portion for supporting the steering handle shaft portion (see Figs. 25-27; col. 13, line 66 - col. 14, line 9). Yamasaki further

discloses a handle moving motor 121a that provides a reaction force direction opposite turning in order to simulate the actual feel of steering (see Fig. 28; col. 14, lines 55-65).

However, Yamasaki fails to disclose the frame portion includes a plurality of main frames, a single spring for giving reaction force in a direction opposite to the turning direction of the steering handle when the steering handle is operated, wherein the single spring is provided with a pair of clamping portions projected outwards from the steering handle shaft portion so as to clamp the external surfaces of one of the main frames therebetween.

McDowell discloses a frame portion with a plurality of main frames (i.e. a left and right frame, see Figs. 1 and 2).

Therefore, in view of McDowell, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the frame of Yamasaki with the plurality of frames of McDowell in order to be more portable since it may sit on any floor surface whereas the invention of Yamasaki sits on a motorized platform.

McDowell and Yamasaki fail to disclose the claimed single spring reaction force mechanism. Tosaki discloses a steering wheel control apparatus for a television game machine. The steering wheel control apparatus features a centering mechanism which provides a reaction force in the direction opposite the turning direction (see col. 19, lines 39-45). The centering mechanism is a single torsion spring 52 (see Figs. 16 and 17; col. 19, lines 56-65), wherein the single spring is provided with a pair of clamping portions 52a and 52b projected outwards from the steering handle shaft portion so as to clamp the frame portion/engagement cylinder 31 therebetween (see Figs. 16 and 17; col. 19, lines 56-65).

Therefore, in view of Tosaki, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the handle moving motor of Yamasaki with the centering mechanism of Tosaki in order to reduce the cost of parts in the system of Yamasaki.

Tosaki does not explicitly disclose that the spring clamps the external surfaces of one of the main frames. However, it would have been obvious to one of ordinary skill in the art to place the spring clamps on external surfaces one of the main frames instead since the invention of Tosaki requires a stationary pole (i.e. the engagement cylinder 31) for the torsion spring to provide reactive forces. Replacing the engagement cylinder with one of the main frames is a simple substitution of one known element for another to achieve predictable results (the main frame provides a stationary pole that causes reaction forces when used with a torsion spring).

Re claim 14: The teachings of Yamasaki, McDowell, and Tosaki as applied to claim 13 above have been discussed.

However, Yamasaki, McDowell, and Tosaki fail to disclose elastic members interposed between the pair of clamping portions of the spring and the frame.

Official Notice was taken in the previous Office Action dated 06/25/2007 that both the concept and advantages of placing damping material (elastic members) between mechanical points of contact was well known and expected in the art at the time the invention was made. Since the applicant did not traverse the official noticed facts by specifically pointing out supposed errors, the official noticed facts taken in the rejection dated 09/22/2005 are now considered admitted prior art. See MPEP §2144.03.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to place elastic members (damping material) interposed between the pair of clamping portions of the spring and the frame in order to reduce the noise caused by the impact of the clamping portions of the spring and the frame.

Re claim 17: The teachings of McDowell and Yamasaki as applied to claim 4 above have been discussed. The examiner notes that the inherited limitation "means for giving a reaction force" of claim 4 does not invoke 35 U.S.C. 112, sixth paragraph in claim 17 since the added limitations of claim 17 provide sufficient structure and material (i.e., a single spring with clamping portions) for achieving the specified function (i.e., giving a reaction force). See MPEP § 2181(I).

However, McDowell and Yamasaki fail to disclose that the means for giving a reaction force is a single spring with clamping portions which clamp one at least one of the two main frames.

Tosaki discloses a steering wheel control apparatus for a television game machine. The steering wheel control apparatus features a centering mechanism which provides a reaction force in the direction opposite the turning direction (see col. 19, lines 39-45). The centering mechanism is a single torsion spring 52 (see Figs. 16 and 17; col. 19, lines 56-65), wherein the single spring is provided with a pair of clamping portions 52a and 52b projected outwards from the steering handle shaft portion so as to clamp the frame portion/engagement cylinder 31 therebetween (see Figs. 16 and 17; col. 19, lines 56-65).

Therefore, in view of Tosaki, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the handle moving motor of Yamasaki with the centering mechanism of Tosaki in order to reduce the cost of parts in the system of Yamasaki.

Tosaki does not explicitly disclose that the spring clamps the external surfaces of one of the main frames. However, it would have been obvious to one of ordinary skill in the art to place the spring clamps on external surfaces one of the main frames instead since the invention of Tosaki requires a stationary pole (i.e. the engagement cylinder 31) for the torsion spring to provide reactive forces. Replacing the engagement cylinder with one of the main frames is a simple substitution of one known element for another to achieve predictable results (the main frame provides a stationary pole that causes reaction forces when used with a torsion spring).

9. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamasaki and Lee as applied to claims 7 and 8 above, and further in view of Clarkson (US 6,122,991).

The teachings of Yamasaki and Lee as applied to claims 7 and 8 above have been discussed.

However, Yamasaki and Lee fail to disclose the steering handle pipe is comprised of a single pipe communicating one end portion one end portion, on which the throttle grip is mounted, and the other end portion to each other.

Clarkson teaches a single pipe handlebar for vehicles (see Fig. 1).

Therefore, in view of Clarkson, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have replaced the handlebars of Yamasaki with the



single pipe handlebars of Clarkson in order to simulate a vehicle which features single pipe handlebars.

10. Claims 15, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDowell, Yamasaki, and Lee.

Re claim 15: The teachings of McDowell and Yamasaki as applied to claim 3 above have been discussed. Yamasaki further discloses the vibration motor is mounted at the end of steering handle pipe (see Fig. 36; col. 17, lines 22-37)

However, McDowell and Yamasaki fail to disclose a taper surface portion formed at an inner circumferential surface of a steering handle pipe constituting the steering handle mechanism, said taper surface portion gradually decreasing in diameter from the side of an end portion of the steering handle pipe and a bracket having an engaging portion for engagement with the end portion of the steering handle pipe, having an outer circumferential surface gradually decreasing in diameter from the side of the engaging portion, and being inserted into the taper surface portion while holding the vibrator wherein the bracket includes a pair of brackets and each of the brackets includes a recess on an inner surface thereof, and when the brackets are mated together, the recesses of the mating brackets form a space in which the vibrator is disposed.

Regarding the pair of brackets enclosing the vibration motor, Lee discloses bracket/case wherein the bracket includes a pair of brackets (upper case 23 and lower case 20, see Fig. 4) and each of the brackets includes a recess on an inner surface thereof (see Fig. 4), and when the

brackets are mated together, the recesses of the mating brackets form a space in which the vibrator is disposed (see Fig. 4).

Therefore, in view of Lee, it would have been obvious to one of ordinary skill in the art at the time the invention was made to mount the vibrator in a pair of brackets forming an enclosure in order to hold the bracket and vibrator in place.

Regarding the taper-shaped bracket and vibrator, Applicant has not disclosed that placing the vibrator in a taper-shaped bracket fitting in a taper surface portion in the steering handle pipe solves any stated problem or is for any particular purpose. Moreover, it appears that the bracket of Lee performs equally well as the taper-shaped bracket of the applicant's invention.

Accordingly, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have modified the system of McDowell, Yamasaki and Lee to have a tapered bracket holding the vibrator in a taper surface portion in the steering handle pipe because such a modification would have been considered a mere design consideration which fails to patentably distinguish over the system of Yamasaki as modified by Lee.

Re claim 16: The teachings of McDowell and Yamasaki as applied to claim 3 above have been discussed.

However, McDowell and Yamasaki fail to disclose the vibrator is held in place in the steering handle pipe by a bracket and the bracket is screw engaged with an end portion of the steering handle pipe wherein the vibrator includes an eccentrically mounted weight extending from an outer end of the vibrator so as to be disposed in the enclosed hollow space.

Lee discloses a bracket/case for holding a vibrator wherein the vibrator includes an eccentrically mounted weight 30 (see Fig. 4) extending from an outer end (the weight extends from the outer ends of upper case 23 and lower case 20 towards the middle of the assembly, see Fig. 4) so as to be disposed in the enclosed hollow space (see Fig. 4).

Therefore, in view of Lee, it would have been obvious to one of ordinary skill in the art at the time the invention was made to mount the vibrator in an enclosed bracket in order to hold the vibrator in place and to prevent foreign objects from interfering with the motion of the eccentric weight.

However, the system of McDowell, Yamasaki, and Lee does not disclose the bracket is held in place by a screw or screws.

Official Notice was taken in the previous Office Action dated 06/25/2007 that both the concept and advantages of mounting a bracket with a screw was well known and expected in the art at the time the invention was made. Since the applicant did not traverse the official noticed facts by specifically pointing out supposed errors, the official noticed facts taken in the rejection dated 09/22/2005 are now considered admitted prior art. See MPEP §2144.03.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to secure the vibrator bracket of the system of Yamasaki as modified by Lee with a screw or screws in order to secure the bracket and vibrator in place.

Re claim 18: The teachings of Yamasaki and Lee as applied to claim 5 above have been discussed. Yamasaki further discloses a brake pedal and gear change pedal which are operated by the feet of the operator (see Fig. 33; col. 6, lines 14-29; col. 16, lines 45-61).

However, Yamasaki and Lee fail to disclose a connection shaft for connecting the steering handle mechanism and the step mechanism to each other, the connection shaft provided to be extendable and contractible along the axial direction thereof, and a frame body having at least two main frames, wherein the steering handle mechanism is mounted at upper portions of the at least two main frames and the connection shaft is mounted to lower portions of the at least two main frames.

McDowell teaches a connection shaft/upper telescopic portion 25 and lower telescopic portion 26 for connecting the steering handle mechanism and the step mechanism to each other, the connection shaft provided to be extendable and contractible (i.e. telescopic) along the axial direction thereof (see col. 6, lines 7-22), a frame body having at least two main frames (i.e. a left and a right side frame, see Fig. 2), wherein the steering handle mechanism is mounted at the upper portions of the at least two main frames (see Fig. 1) and the connection shaft is mounted to lower portions of the at least two main frames (steering wheel base portion 29, see Fig. 1; col. 5, lines 50-67).

Therefore, in view of McDowell, it would have been obvious to one of ordinary skill in the art to add or substitute the structural features of McDowell in the system of Yamasaki and Lee in order to provide a more portable system since the frame of McDowell may be placed on any flat surface and does not require a motion platform.

11. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamasaki and Duignan as applied to claim 11 above, and further in view of McDowell. Yamasaki further

discloses a brake pedal and gear change pedal which are operated by the feet of the operator (see Fig. 33; col. 6, lines 14-29; col. 16, lines 45-61).

However, Yamasaki and Duignan fail to disclose a connection shaft for connecting the steering handle mechanism and the step mechanism to each other, the connection shaft provided to be extendable and contractible along the axial direction thereof, and a frame body having at least two main frames, wherein the steering handle mechanism is mounted at upper portions of the at least two main frames and the connection shaft is mounted to lower portions of the at least two main frames.

McDowell teaches a connection shaft/upper telescopic portion 25 and lower telescopic portion 26 for connecting the steering handle mechanism and the step mechanism to each other, the connection shaft provided to be extendable and contractible (i.e. telescopic) along the axial direction thereof (see col. 6, lines 7-22), a frame body having at least two main frames (i.e. a left and a right side frame, see Fig. 2), wherein the steering handle mechanism is mounted at the upper portions of the at least two main frames (see Fig. 1) and the connection shaft is mounted to lower portions of the at least two main frames (steering wheel base portion 29, see Fig. 1; col. 5, lines 50-67).

Therefore, in view of McDowell, it would have been obvious to one of ordinary skill in the art to add or substitute the structural features of McDowell in the system of Yamasaki and Duignan in order to provide a more portable system since the frame of McDowell may be placed on any flat surface and does not require a motion platform.

*Response to Arguments*

12. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Regarding Applicant's arguments of claim 1 on page 15, the examiner respectfully disagrees. Applicant argues that McDowell does not teach a frame body having at least two main frames, wherein the steering handle mechanism is mounted at upper portions of the at least two main frames and the connection shaft is mounted to lower portions of the at least two main frames. "Main frames" may be broadly interpreted as the left and right side frames of McDowell. Either the upper telescopic portion 25 or lower telescopic portion 26 of McDowell may be interpreted to be the claimed connection shaft. The steering mechanism is connected at the upper portion of the main frames and the connection shaft/telescopic portions are connected to the bottom of the frame that touches the base/floor.

*Conclusion*

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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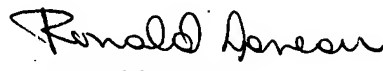
CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin W. Lee whose telephone number is 571-270-1346. The examiner can normally be reached on Mon - Fri (8:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on 571-272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BWL  
Benjamin W. Lee  
November 30, 2007

  
Ronald Laneau  
Primary Examiner  
Art Unit 3714

12/3/07